

2020 ADVANCED DUI TRIAL ADVOCACY

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Useful DUI Studies

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Studies

Some HGN Studies Info

[***“The Robustness of Horizontal Gaze Nystagmus Test”***, Dr. Marcelline Burns (Southern California Research Institute), September, 2007. NOTE: this study has been removed from the HGN curriculum. It was not peer reviewed and there were problems with its administration. It was not a validation study and the fact that it once was, but is no longer, used in the HGN curriculum does not invalidate HGN or call into question the continued validity of HGN.]

Study: Nystagmus Testing in Intoxicated Individuals: Dr. Karl Citek, et. al, November 2003.

Dr. Citek, who is an ophthalmologist, and recognized expert in the field of HGN, conducted a study testing HGN and VGN at different positions: standing, seated, and supine. He confirmed the validity of the HGN test in the standing posture to discriminate blood alcohol levels of .08 and .10. He also established, with similar accuracies and reliabilities, the use of the HGN test in the seated and supine postures. There was a statistical difference in the observation of HGN based on test posture. The difference happened in the seated position and was attributed to the difficulty of seeing the eyes. If officers have to conduct the HGN in the seated position, it is recommended that they position the subject in such a way that the subject's eyes can be seen easily throughout the test. This may involve asking the subject to turn the body slightly at the waist, in addition to the head turn used in the current study. Such a minor change in posture will not affect the result. They also confirmed that VGN is present only when signs of HGN are present, and that the VGN test can be used to identify high levels of impairment at any test posture.

Study: Sleep Deprivation Does not Mimic Alcohol Intoxication on Field Sobriety Testing: Dr. Karl Citek et. al, October, 2011.

Subjects participated in two test sessions: one after a full night's rest and the other after staying awake for at least 24 hours. Subjects consumed set amounts of alcohol during each session. Law enforcement officers conducted the standardized field sobriety tests. Researchers also measured clinical responses of visual function and vital signs. The presence and number of validated impairment clues increased with increasing blood alcohol concentration but not with sleep deprivation. The study concluded sleep deprivation alone does not affect motor skills in a manner that would lead an officer to conclude that the suspect is intoxicated. Intoxication must also be present.

Additional Useful Studies

Curtesy of Tobin Sidles

Summaries of NHTSA Studies – DRE

John Hopkins: In the 1980's LAPD started a fledgling DRE program. NHTSA was asked to evaluate it for reliability. NHTSA, with John Hopkins University, did a study in 1984 and developed a protocol. Given 15 minutes, the officers had to determine if the volunteer was impaired by drugs. The DRE's were 90% accurate. NHTSA Pub. No. DOT HS 806 753 (1985).

173 Case Study: In 1985 NHTSA conducted a field validation Study of the LAPD DRE program. The study is usually called "the 173 case study". 94% of the time a drug other than alcohol was found as verified when the DRE's stated the suspect was impaired by drugs

Arizona DRE Study: 1994 Drug Recognition Expert (DRE) validation study (Eugene Adler AZDPS, M. Burns-Southern California Research Institute) and a final report was sent to the Governor's Office of Highway Safety.

Cannabis: *Drug Recognition Expert (DRE) Examination Characteristics of Cannabis Impairment*, Rebecca L Hartman, et al (July 2016). Results include: Finger to nose with over three misses best indicator. Eyelid tremors better than an 86.1% predictor. Recommended overall: FTN over 3 misses, eyelid tremors, OLS sway, 2 WAT cues. If 2 or more out of these 4, impaired.

Boating/Seated FSTs

Validation of Sobriety Tests for Marine Environment, D. Fiorentino, So. Cal R. I (2010)